

spectrum signal orthogonal to all other chip codewords of the first plurality of remote units for the first plurality of remote-communications signals and with timing of each of the first plurality of remote units adjusted for transmitting the first plurality of remote-communications signals for arriving simultaneously at said first base station;

communicating simultaneously from said second base station to said second plurality of remote units using synchronous, code division multiple access at the second carrier frequency and the first power level with a second plurality of base-communications signals having spread-spectrum modulation with a chip codeword for each spread-spectrum signal orthogonal to all other chip codewords of the second plurality of base-communications signals;

communicating simultaneously from said second base station to said fourth plurality of remote units using synchronous, code division multiple access at the first carrier frequency and the second power level greater than the first power level with a fourth plurality of base-communications signals using spread-spectrum modulation with a chip codeword for each spread-spectrum signal orthogonal to all chip codewords of the fourth plurality of base-communications signal;

communicating simultaneously from said second plurality of remote units to said second base station using synchronous, code division multiple access with a second plurality of remote-communications signals at the second carrier frequency using spread-spectrum modulation with a chip codeword for each spread spectrum signal orthogonal to all chip codewords of the second plurality of remote-communications signals and with timing of each of the second plurality of remote units adjusted for transmitting the second plurality of remote-communications signals for arriving simultaneously at said second base station;

detecting, at said second base station, exceeding a predetermined threshold, a power level of a remote-communications signal transmitted from said transitioning-mobile unit;

signalling, from said second base station through said first base station to said transitioning-remote unit, to transfer said transitioning-remote unit to the second carrier frequency and a new chip codeword for communicating with said second base station;

accessing from said transitioning-remote unit using an access protocol at the second carrier frequency, said second base station; and

communicating between said second base station using the new chip codeword, and direct sequence spread spectrum modulation at the second carrier frequency.

2. A method for handing off a transitioning-remote unit traversing from a first microcell having a first base station communicating with a first plurality of remote units, with said transitioning-remote unit included with said first plurality of remote units, to a second microcell having a second base station communicating with a second plurality of remote units, comprising the steps of:

communicating simultaneously from said first base station to said first plurality of remote units at a first carrier frequency with a first plurality of base-communications signals using spread-spectrum modulation with a chip codeword for each spread-spectrum signal orthogonal to all chip codewords of the first plurality of base-communications signals;

munications signals using direct sequence spread-spectrum modulation;

communicating from said transitioning-remote unit to said first base station at the first carrier frequency with a remote-communications signal using direct sequence spread-spectrum modulation;

communicating simultaneously from said second base station to said second plurality of remote units at the second carrier frequency with a second plurality of base-communications signals using direct sequence spread-spectrum modulation;

detecting, at said second base station, a power level of the remote-communications signal, exceeding a predetermined threshold, transmitted from said transitioning-mobile unit;

signalling, from said second base station through said first base station to said transitioning-remote unit, to transfer said transitioning-remote unit to the second carrier frequency and a new chip codeword for communicating with said second base station;

accessing from said transitioning-remote unit using an access protocol, said second base station; and

communicating from said transitioning-remote unit to said second base station using the new chip codeword, and direct sequence spread spectrum modulation at the second carrier frequency.

3. A method for handing off a transitioning-remote unit traversing from a first microcell having a first base station communicating with a first plurality of remote units, with said transitioning-remote unit included among the first plurality of remote units, to a second microcell having a second base station communicating with a second plurality of remote units, comprising the steps of:

communicating simultaneously from said first base station to said first plurality of remote units at a first carrier frequency with a first plurality of base-communications signals using spread-spectrum modulation with a chip codeword for each spread-spectrum signal orthogonal to all chip codewords of the first plurality of base-communications signals;

communicating from said transitioning-remote unit to said first base station at the first carrier frequency with a remote-communications signal using direct sequence spread-spectrum modulation;

communicating simultaneously from said second base station to said second plurality of remote units at the second carrier frequency with a second plurality of base-communications signals using spread-spectrum modulation with a chip codeword for each spread-spectrum signal orthogonal to all chip codewords of the third plurality of base-communications signals;

detecting, at said second base station, a power level of the remote-communications signal, exceeding a predetermined threshold, transmitted from said transitioning-mobile unit;

signalling, from said second base station through said first base station to said transitioning-remote unit, to transfer said transitioning-remote unit to the second carrier frequency and a new chip codeword for communicating with said second base station;

accessing from said transitioning-remote unit using an access protocol, said second base station; and

communicating from said transitioning-remote unit to said second base station using the new chip codeword, and direct sequence spread spectrum modulation at the second carrier frequency.